DERWENT-ACC-NO: 2002-225856
DERWENT-WEEK: 200235

TITLE: Planographic printing method, for recording image, comprises forming distribution of hydrophobic and hydrophilic areas as-per-image on photocatalytic original printing plate, heating and irradiating with activation light

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PATENT-ASSIGNEE: FUJI PHOTO FILM CO LTD[FUJF]

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20020001776 A1	January 3, 2002	N/A	032	G03F 007/04
JP 2002079774 A	March 19, 2002	N/A	025	B41N 001/14

APPLICATION-DATA:

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US20020001776A1	N/A	2001US-0887334	June 25, 2001
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ABSTRACTED-PUB-NO: US20020001776A

BASIC-ABSTRACT: NOVELTY - A hydrophobic layer is uniformly

provided on an
original printing plate having photocatalytic property.
The original plate is
heated between 40-200 deg. C and irradiated with
activation light to form
hydrophilic and hydrophobic areas as-per-image. Printing
is performed in the
ink accepting hydrophobic areas.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included
for: (a) Original
plate for planographic printing; and (b) Planographic
printing press comprising
a mounting unit for mounting original plate, a processing
unit for
hydrophobically processing the entire surface of original
plate on which
hydrophobic layer is formed, an activation light
irradiation unit (5) for
irradiating activation light, a heating unit, an ink supply
unit for supplying
an ink to hydrophobic area and a damping solution to
hydrophilic area, and a
printing unit for printing by bringing a printing surface,
so that the
hydrophobic area accepts the ink and hydrophilic area
accepts the damping
solution.

USE - For recording images.

ADVANTAGE - The photocatalyst material simplifies printing
and platemaking
process. The printing plate is prepared directly without
requiring any
development process. The plate preparation time is
shortened, and durability
and print quality are improved. Polarity changing rate of
the photocatalyst
substance is made fast by irradiation. The planographic
printing method has
high sensitivity to activation light, and ensures an
excellent distinction
property of imaged and non-imaged portions. The method
enables complete
deletion of the image history on the printing plate, and
enables repeated use
of the original printing plate. The method enables

inexpensive offset
printing.

DESCRIPTION OF DRAWING(S) - The figure shows a view of the construction of an
offset printing press.

Plate cylinder 1

Hydrophobic processing unit 2

Damping solution supply unit 3

Ink wash-off unit 4

Activation light irradiation unit 5

CHOSEN-DRAWING: Dwg.2/10

TITLE-TERMS:
PLANOGRAPHIC PRINT METHOD RECORD IMAGE COMPRISE FORMING DISTRIBUTE HYDROPHOBIC
HYDROPHILIC AREA PER IMAGE PHOTOCATALYST ORIGINAL PRINT PLATE HEAT IRRADIATE
ACTIVATE LIGHT

DERWENT-CLASS: A89 G07 P84

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